

## The Impact of the “Sport World Campus” App on Physical and Mental Health in Chinese Vocational College Students: A Systematic Review (Kesan Aplikasi “Sport World Campus” terhadap Kesehatan Fizikal dan Mental Pelajar Kolej Vokasional di China: Tinjauan Sistematik)

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### ABSTRACT

*In an increasingly digital society, fitness applications have become integral to health management. This study evaluates the “Sport World Campus” APP’s impact on students’ physical and mental health in Chinese vocational colleges. The research aims to assess the effectiveness of this app in improving students’ health, focusing on its exercise tracking, data analysis, course learning, and social interaction features. A systematic literature review method was employed, examining studies retrieved from CNKI and Google Scholar. The analysis included 38 relevant articles, screened and coded for content analysis. The findings indicate that the app significantly enhances cardiovascular function, endurance, and muscle strength while improving mental health by alleviating academic pressure and boosting motivation and a sense of belonging. Gender, age, major, family economic status, and parents’ educational background influence the app’s effectiveness. The study concludes that vocational colleges should promote fitness apps, tailor app designs to individual student needs, and engage with students’ families. Future research should explore the app’s effectiveness across diverse educational and cultural contexts and validate findings through field studies. This research offers practical recommendations for integrating fitness apps into educational practices to support student health.*

**Key Words:** Sport World Campus APP, vocational college students, physical and mental health, fitness management software, systematic literature review

### ABSTRAK

*Dalam masyarakat yang semakin digital, aplikasi kebugaran telah menjadi komponen penting dalam pengurusan kesihatan. Kajian ini menilai kesan aplikasi “Sport World Campus” terhadap kesihatan fizikal dan mental pelajar di kolej vokasional di China. Penyelidikan ini bertujuan untuk menilai keberkesanan aplikasi ini dalam meningkatkan kesihatan pelajar; dengan fokus pada ciri-ciri penjejakan senaman, analisis data, pembelajaran kursus, dan interaksi sosialnya. Kaedah ulasan literatur sistematik telah digunakan, dengan mengkaji kajian-kajian yang diperoleh daripada CNKI dan Google Scholar. Analisis ini melibatkan 38 artikel yang relevan, yang telah disaring dan dikod untuk analisis kandungan. Hasil kajian menunjukkan bahawa aplikasi ini secara signifikan meningkatkan fungsi kardiovaskular, daya tahan, dan kekuatan otot, sambil memperbaiki kesihatan mental dengan mengurangkan tekanan akademik serta meningkatkan motivasi dan rasa kekitaan. Jantina, umur, jurusan, status ekonomi keluarga, dan latar belakang pendidikan ibu bapa mempengaruhi keberkesanan aplikasi ini. Kajian ini menyimpulkan bahawa kolej vokasional harus mempromosikan aplikasi kebugaran, menyesuaikan reka bentuk aplikasi mengikut keperluan individu pelajar, dan melibatkan keluarga pelajar. Penyelidikan masa depan harus meneroka keberkesanan aplikasi ini dalam konteks pendidikan dan budaya yang pelbagai serta mengesahkan penemuan melalui kajian lapangan. Kajian ini menawarkan cadangan praktikal untuk mengintegrasikan aplikasi kebugaran ke dalam amalan pendidikan bagi menyokong kesihatan pelajar.*

**Kata Kunci:** Aplikasi Sport World Campus, pelajar kolej vokasional, kesihatan fizikal dan mental, perisian pengurusan kebugaran, ulasan literatur sistematik

## INTRODUCTION

The integration of sports applications (apps) into the daily routines of college students has become increasingly widespread, driven by advancements in information technology and the development of smart campuses. These apps are specifically designed to augment physical education by offering students a more convenient and effective platform for engaging in physical activities. Research has demonstrated that sports apps can positively influence college students' attitudes toward physical exercise and improve their overall physical fitness. However, despite their growing popularity, several challenges and issues must be addressed to fully realize the potential benefits of these apps. While evidence suggests that sports apps positively impact physical exercise attitudes and fitness levels, further empirical research is needed to substantiate these claims. Existing studies indicate that sports apps can enhance students' enthusiasm for physical exercise and provide innovative ideas for teaching reform in physical education (Li, 2023; Gu et al., 2021). Nevertheless, the extent to which these apps contribute to sustained long-term physical health improvements remains uncertain. Another critical area of investigation is the relationship between physical activity facilitated by sports apps and mental health outcomes. It is well-established that higher levels of physical activity correlate with better mental health among college students. However, the specific role of sports apps in promoting mental well-being requires further exploration. One significant challenge with sports apps is maintaining user engagement over time. Although initial adoption rates may be high, sustaining long-term usage often proves difficult.

Research suggests that sports apps can increase students' sports participation and set more active exercise goals (Gu et al., 2021). Nonetheless, developing strategies to keep students consistently engaged and motivated to use these apps remains essential. Enhancing the effectiveness of sports apps may be achieved through the incorporation of customization and personalization features tailored to individual needs and preferences. By addressing these challenges, sports apps have the potential to play a more significant role in promoting both physical and mental well-being among college students. Current research underscores the critical need to improve existing sports apps to better align with the specific needs of college students (Gu et al., 2021). Developing more personalized and adaptive features within these apps could significantly enhance their effectiveness and user satisfaction. Integrating sports apps into formal physical education programs presents both promising opportunities and notable challenges. While these apps have the potential to complement traditional physical

education methods by offering additional resources and support for students, there is a pressing need for a structured approach to ensure their effective implementation. Research suggests that sports apps can diversify and enrich extracurricular physical exercise forms and projects, thereby broadening exercise motivation (Li, 2023). However, the optimal practices for integrating these apps into the educational curriculum remain to be fully established.

In China's higher vocational colleges, the physical fitness and mental health of students are vital components of the educational framework. Yet, due to intense academic pressures and limited access to exercise resources, the physical and mental well-being of vocational college students is a growing concern. These students often face significant challenges in maintaining their overall health, with issues such as unhealthy lifestyles, heightened stress levels, and insufficient physical activity contributing to a decline in their wellness. Recent studies have revealed substantial disparities in physical fitness levels among students in higher vocational colleges compared to national norms, highlighting the urgent need for targeted interventions to improve their health outcomes (Yu & Deng, 2019). The "Healthy China" strategy emphasizes the integration of health knowledge and the promotion of lifelong sports awareness within the curriculum as a means to address these challenges (Wu, 2021). Physical exercise has been consistently shown to positively impact students' mental health, providing a robust theoretical foundation for the inclusion of physical education in mental health strategies (Bai, 2018). Additionally, empirical research has demonstrated a strong association between physical fitness and overall health status, underscoring the necessity of comprehensive health programs within educational institutions (Wang et al., 2020). Moreover, traditional Chinese exercises, such as Baduanjin, have been found to significantly improve both physical and mental health outcomes among college students, suggesting that incorporating such practices into physical education programs could be highly beneficial (Li et al., 2015).

Conversely, excessive screen time combined with low levels of physical activity has been linked to increased risks of mental health issues and poor sleep quality, further highlighting the importance of balanced lifestyles (Wu et al., 2015). The ongoing decline in physical fitness among college students in recent years calls for immediate and concerted efforts to enhance individual and public health through improved physical education programs (Wang, 2019). In conclusion, integrating mental health education with physical education and advocating for the "sports-medicine integration" model offers a holistic approach to improving the overall health and well-being of vocational college students in China (Zhu & Li, 2022; Lyu et al., 2022). This paper seeks to explore the impact of sports apps on

the physical and mental health development of college students, drawing on recent research findings to provide a comprehensive understanding of this emerging phenomenon.

## LITERATURE REVIEW

### STUDIES ON THE “SPORT WORLD CAMPUS” APP

The “Sports World Campus” app (hereafter referred to as the “campus running” app) is a widely utilized sports application across university campuses in China, with many institutions mandating its use for student running exercises (Wei & Qi, 2020). This broad, compulsory implementation of the “campus running” app provides a valuable practical basis for addressing the research gap concerning the factors influencing the use of sports apps in mandatory contexts. Existing research has extensively examined the functions and impacts of the “Sports World Campus” app, which is specifically designed for college students. The emergence of fitness apps, including the “campus running” app, aligns with the goals of the “Healthy China 2030” initiative and the advancements in internet technology. These apps are intended to record exercise data, disseminate health knowledge, and support users in cultivating healthy habits and lifestyles (Haibo, 2022). The “Sports World Campus” app has gained widespread adoption across many universities, offering features such as a positioning system, a visualization intelligence system, and a voice prompt system. Students can select from various modes, including group runs, scoring runs, free runs, and indoor workouts, all of which are incorporated into physical education activities. By leveraging extensive information technology, the app fosters an innovative teaching model that integrates the Internet with university sports courses, encouraging students to leave their dormitories and pursue a healthier lifestyle (Zhang, 2022). The success and sustained use of fitness apps, including the “Sports World Campus” app, can be attributed to their ability to provide users with convenience, efficiency, and reliability (Guo & Choi, 2020).

Furthermore, the apps’ capacity to protect personal information and data enhances user engagement, particularly with social connection functions, which are essential for fostering a sense of community and motivation among college students (Peng-Cheng et al., 2023). As fitness apps continue to evolve and become increasingly integrated into the daily routines of college students, it is essential to understand their long-term implications for student health and wellness (Gowin et al., 2015). The development of intelligent physical education in colleges and universities represents the intersection of traditional physical education and modern information technology, combining teaching, exercise, competition, and entertainment to address the

diverse needs of students (Zhang, 2022). This integration not only facilitates a more holistic approach to student well-being but also underscores the transformative potential of digital tools in higher education settings.

### STUDIES ON THE PHYSICAL AND MENTAL HEALTH DEVELOPMENT OF VOCATIONAL COLLEGE STUDENTS

Vocational colleges in China face considerable challenges in safeguarding the physical and mental health of their students, primarily due to the intense academic pressures and the limited availability of exercise resources. Physical and mental health, as a comprehensive concept, encompasses both physiological and psychological well-being (Wei & Ma, 2022). Physical health, as defined by various scholars, refers to the normal functioning of the body, characterized by a disease-free and physically fit state. However, surveys indicate that a significant proportion of college students in China, including those in vocational institutions, are grappling with physical health issues stemming from sedentary lifestyles and insufficient physical activity (Huang, 2020). This trend is particularly concerning, as deteriorating physical health can adversely affect students’ overall well-being and academic performance. Mental health, in contrast, is understood as a continuous psychological state in which an individual is capable of adapting well, maintaining a positive mindset, and fully realizing their potential.

Unfortunately, many vocational college students in China suffer from mental health challenges, including high levels of stress, anxiety, and depression, largely attributable to the immense academic pressures they encounter (Liao, 2023). These mental health issues can trigger a cascade of other problems, such as decreased motivation, poor academic performance, and, in severe cases, suicidal thoughts. Addressing these challenges requires a multifaceted approach from both colleges and the government. Implementing mental health education programs based on positive psychology could help students develop resilience and a more optimistic outlook, providing them with the tools necessary to better manage stress and sustain their mental well-being (Long, 2021). Additionally, increasing investment in physical education and recreational facilities could encourage greater physical activity among vocational college students, thereby helping to counteract the detrimental effects of sedentary lifestyles and promoting overall well-being. By adopting these strategies, vocational colleges can create a more supportive environment that fosters both the physical and mental health of their students, ultimately enhancing their academic success and quality of life.

Considering the following overarching questions, we conducted the following literature analysis:

- a. Question 1. What are the main Factors Influencing the Use of the “Sport World Campus” APP?
- b. Question 2: What are the impacts of the “Sport World Campus” APP on Students’ Physical and Mental Health?

## METHODOLOGY

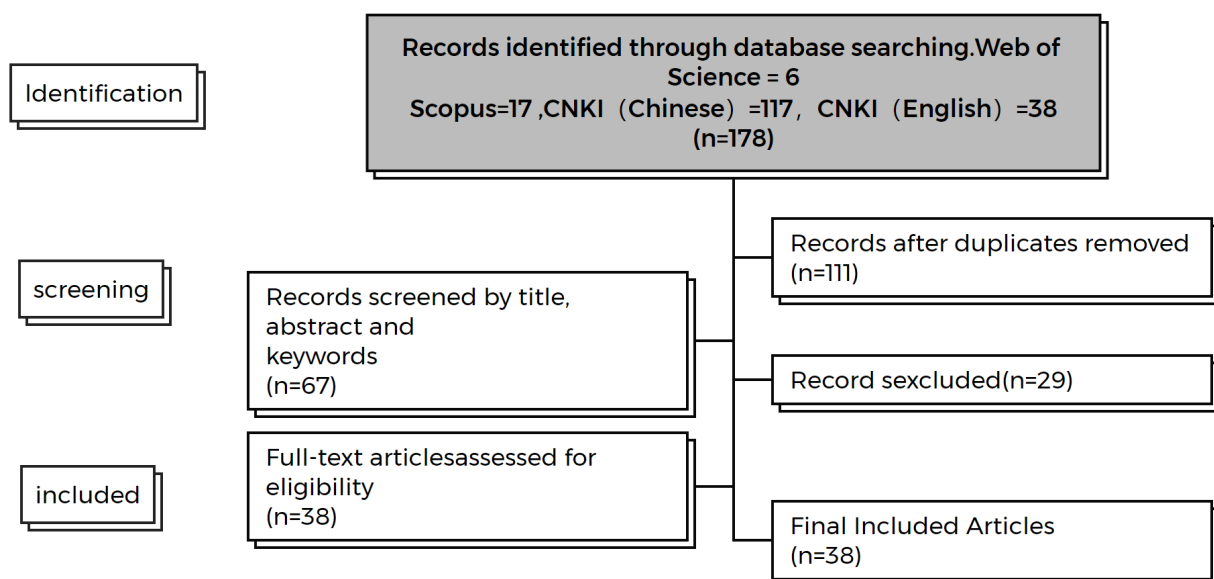
Based on Table 1, the research utilizes the Systematic Literature Review (SLR) method to comprehensively evaluate the impact of the “Sport World Campus” app on students’ physical and mental health development in Chinese vocational colleges. The SLR method, known for its rigorous approach, systematically searches, screens, and analyses existing research to generate comprehensive findings. By employing the SLR method, this study ensures the comprehensiveness and reliability of the research, mitigating biases and inconsistencies that may arise in traditional literature reviews. During the data collection phase, literature searches were primarily conducted through two major databases: CNKI and Google Scholar. Keywords such as “Sport World Campus APP,” “vocational college students,” “physical and mental health,” and “fitness management software” were used to retrieve relevant literature.

**Table 1.** Research Design and Data Collection Methods

Research Steps	Description
Research Design	Adopted the Systematic Literature Review (SLR) method to systematically search, screen, and analyze literature
Data Collection	Conducted literature searches mainly through CNKI and Google Scholar
Data Analysis	Used content analysis to code and categorize the included studies

The search period was restricted to articles published between 2015 and 2021 to maintain the timeliness and relevance of the research data. Initially, 178 related articles were identified, comprising 117 in Chinese and 61 in English. These articles were then subjected to screening based on predefined inclusion and exclusion criteria. The inclusion criteria required that the studies focus on vocational college students, involve the “Sport World Campus” app, measure students’ physical and mental health, and employ empirical research methods. Exclusion criteria included studies unrelated to the research topic, those lacking complete research data, and duplicate publications. After a thorough screening process, 26 articles met the inclusion criteria and were selected for analysis (Refer to Figure 1).

**Figure 1.** Research Literature Sources and Screening Process



In the data analysis phase, content analysis was employed to systematically interpret and code the included studies. Content analysis, a qualitative research method, involves categorizing and coding textual content to extract key themes and draw meaningful conclusions. The analysis process began with open coding, where each article was divided into several thematic units. Next, axial coding was used to group similar thematic units into broader concepts. Finally, selective coding was applied to identify core themes and synthesize the main conclusions of the literature. To ensure the reliability and validity of the research findings, several measures were implemented. First, during the literature screening process, a double-blind review method was utilized, with two researchers independently screening and evaluating the literature to minimize subjective bias. Second, triangulation was employed during data analysis, incorporating multiple data sources and analysis methods to facilitate cross-validation and enhance the reliability of the results. Finally, the research findings underwent multiple rounds of discussion and revision to ensure the accuracy and consistency of the conclusions. These measures collectively strengthened the credibility and robustness of the study's outcomes.

A search on CNKI and Google Scholar yielded 178 articles related to this research topic, comprising 117 in Chinese and 61 in English. These studies predominantly investigate the effectiveness of the "Sports World Campus" app in significantly promoting the physical and mental health of college students through personalized exercise plans and data monitoring. The app's exercise guidance function and incentive mechanisms not only enhance students' physical fitness but also contribute to emotional regulation and psychological improvement through its mental health module. Additionally, the social interaction features foster a positive atmosphere, further boosting users' exercise motivation and sense of belonging.

#### WHAT ARE THE MAIN FACTORS INFLUENCING THE USE OF THE "SPORT WORLD CAMPUS" APP?

Table 3 highlights key factors influencing the use of the "Sport World Campus" app among students, based on various studies. The usage of the "Sport World Campus" app among students is influenced by several key factors, as identified in various studies. Gender plays a significant role, with research by Yang (2017) and Cheng (2019) indicating that female students are more inclined to use fitness apps compared to their male counterparts. This trend may be attributed to a greater awareness or interest in health and fitness among female students. Age is another important factor, with senior students showing a higher reliance on fitness apps. Studies by Feng (2018) and Ma (2020) suggest that this increased usage among older students is likely due to their reduced availability for physical exercise, making fitness apps a convenient alternative to maintain their fitness levels. The academic major of students also impacts their use of the app. The Medical students, for instance, tend to use fitness apps less frequently, as highlighted by Li (2017) and Du (2018). The demanding schedules and tight academic commitments associated with medical studies leave these students with less time to engage in app-based fitness activities.

Socioeconomic status further influences app usage, with Tong (2022) finding that students from wealthier families are more likely to use fitness apps. This may be due to greater access to technology and fitness-related resources among students from better-off families. Lastly, the educational background of students' parents also plays a role. According to Dong (2023), students whose parents have higher levels of education are more likely to use fitness apps, possibly reflecting a greater emphasis on health and wellness within these families.

**Table 3:** Main Factors Influencing the Use of the "Sport World Campus" APP

Factors	Description	Related Studies
Gender	Female users are more inclined to use fitness apps	Yang (2017) Cheng (2019)
Age	Senior students rely more on fitness apps due to less exercise time	Feng (2018) Ma (2020)
Major	Medical students use fitness apps less frequently due to tight schedules	Li (2017) Du (2018)
Family Economic Status	Students from better-off families are more likely to use fitness apps	Tong (2022)
Parents' Educational Background	Students with more educated parents are more likely to use fitness apps	Dong (2023)

In summary, the use of the “Sport World Campus” app is shaped by a combination of demographic, academic, and socioeconomic factors, with gender, age, academic major, family economic status, and parental education all contributing to students’ engagement with the app.

Li (2017) conducted a study across six universities in Shanxi Province, revealing that fitness apps have both explicit and implicit impacts on the physical and mental health development of college students. Explicit impacts encompass seven aspects: exercise frequency, duration, intensity, types of activities, venues, organizational participation, and sports consumption. Students with higher physical and mental health development scores demonstrated superior performance in these areas. Furthermore, fitness apps positively influence college students’ implicit sports behaviors, such as their sport’s needs, motivations, attitudes, and values. Du (2018) similarly found that fitness apps enhance students’ physical fitness, endurance, cardiovascular function, exercise explosive power, and overall fitness, thereby contributing to improved physical and mental health. These findings are supported by other studies, which consistently indicate that fitness apps play a significant role in enhancing the physical and mental well-being of college students. In recent years, fitness apps have assumed an increasingly pivotal role in promoting physical and mental health.

A thorough analysis of the relevant literature allows for a synthesis of the key points, current development status, and existing gaps in these studies. Both domestic and international scholars have conducted extensive research on the relationship between the “Sport World Campus” app and the physical and mental health of college students. Generally, these studies conclude that the app effectively improves college students’ physical fitness, enhances cardiovascular function, and reduces the risk of disease. Additionally, the app’s facilitation of exercise helps students alleviate academic pressure, improve sleep quality, and promote overall physical and mental health. Domestic scholars primarily focus on the practical application value of the “Sport World Campus” app, particularly within the context of college campuses.

In contrast, international research on fitness apps tends to concentrate on their medical applications, such as human monitoring functions, sports rehabilitation, and disease intervention, with less emphasis on their use among college students. Given this disparity, the integrated development of the “Sport World Campus” app within campus life emerges as a promising area of exploration. This study aims to examine the relationship between the “Sport World Campus” app and the physical and mental health of vocational college students, with a particular focus on strengthening its integration with other campus applications

to facilitate resource sharing and mutual benefits. By doing so, the research seeks to offer a more comprehensive understanding of the app’s impact and potential within the unique context of vocational college students’ lives.

The Theory of Reasoned Action, introduced by Fishbein and Ajzen in 1975, has served as a foundational framework for understanding the connection between individual attitudes and behavioral intentions (Hagger, 2019). According to this theory, individuals make rational decisions by carefully evaluating available information, with their behavior being directly influenced by their behavioral intentions. These intentions are shaped by both attitudes and subjective norms. Meanwhile, the Information Systems Success Model, commonly known as the D&M model, is a widely utilized framework in the field of information systems (DeLone & McLean, 2003). Initially proposed in 1992, the D&M model posits that the success of an information system results from the interaction of six key variables: system quality, information quality, use, user satisfaction, individual impact, and organizational impact (DeLone & McLean, 2003). The updated version of the model, released in 2003, added service quality and net benefits to the framework, suggesting that the intention to use an information system and user satisfaction collectively influence the system’s net benefits.

Research has shown that the Theory of Reasoned Action and the Information Systems Success Model are closely interconnected and can be combined to provide a more comprehensive understanding of user behavior and information system success (Sabherwal et al., 2006). For example, studies have demonstrated that perceived usefulness and perceived ease of use key constructs in the Technology Acceptance Model, which is a derivative of the Theory of Reasoned Action can significantly affect an individual’s intention to use an information system. This, in turn, influences their level of satisfaction and the overall success of the system (Scherer et al., 2019). Additionally, the goals and psychological responses of decision-makers, as emphasized in the Theory of Technological Learning and Usage, play a crucial role in the adoption of information systems. The Theory of Reasoned Action also offers valuable insights into the factors that shape an individual’s attitude and subjective norms, both of which impact their intention to use an information system. Research has highlighted that subjective norm, including the influence of peers and superiors, can significantly affect an individual’s decision to adopt and use an information system, even if their attitude toward the system is not entirely positive (Sabherwal et al., 2006).

In conclusion, integrating the Theory of Reasoned Action with the Information Systems Success Model provides a deeper understanding of the complex and multifaceted factors that determine the success of

information systems. By considering both the cognitive and behavioral aspects of user acceptance, as well as the technical and organizational factors that contribute to system success, researchers and practitioners can develop more effective strategies for designing and implementing information systems that align with users' needs and expectations. This integrated approach not only enhances the likelihood of system success but also supports the broader objective of creating user-centric information systems that deliver tangible benefits.

#### WHAT ARE THE IMPACTS OF THE "SPORT WORLD CAMPUS" APP ON STUDENTS' PHYSICAL AND MENTAL HEALTH?

The "Sport World Campus" app has been shown to have a significant impact on both the physical and mental health of students. Based on Table 4, research has demonstrated that the app plays a vital role in enhancing various aspects of physical fitness. Studies by Yang (2017) and Cheng (2019) have highlighted how the app contributes to improving cardiovascular function, increasing endurance, and strengthening muscles. By providing structured workout routines and tracking physical activities, the app effectively

supports students in achieving better physical health outcomes. In addition to physical benefits, the "Sport World Campus" app also positively influences students' mental health. Li (2017) and Du (2018) have found that the app helps users manage their emotions, reduce academic pressure, and enhance overall mental well-being. Through features that encourage mindfulness and stress management, the app becomes a valuable tool for students dealing with the demands of academic life.

Moreover, the app significantly boosts exercise motivation among students. Song (2016) has pointed out that the app's social interaction features create a sense of community and belonging, which in turn increases users' motivation to engage in regular physical activity. By connecting students with peers who share similar fitness goals, the app fosters a supportive environment that encourages consistent participation in physical exercise. Overall, the "Sport World Campus" app serves as a comprehensive tool that not only enhances students' physical fitness but also supports their mental health and motivation to stay active. Through its multifaceted approach, the app contributes to the holistic well-being of students, making it an essential resource for maintaining a balanced and healthy lifestyle during their academic journey.

**Table 4:** Impact of the "Sport World Campus" APP on Students' Physical and Mental Health

Health Indicators	Description	Related Studies
Physical Fitness	Improves cardiovascular function, endurance, and muscle strength	Yang (2017) Cheng (2019)
Mental Health	Adjusts emotions, alleviates academic pressure, and improves mental health	Li (2017) Du (2018)
Exercise Motivation	Enhances exercise motivation and sense of belonging through social interaction features	Song (2016)

Vocational college students encounter a distinct set of challenges that significantly influence their physical and mental health development. Factors such as gender, academic major, parental educational background, and family status have been identified as critical determinants of health outcomes within this population (Lin, 2016). While some studies suggest that gender does not lead to significant differences in the physical and mental health development of vocational college students, others have reported notable disparities in health literacy levels based on gender. For instance, students in medical programs generally exhibit higher health literacy levels compared to their peers in other academic disciplines (Sukys et al., 2017). Parental educational attainment is another crucial factor, with higher levels of parental education being associated with better physical and mental health outcomes in vocational college

students. Additionally, family involvement—such as participation in physical exercise and income levels—can substantially impact students' health development (Gustian & Firdaus, 2020).

Compounding factors like academic pressure, financial burdens, and uncertainty regarding the transition to the workforce can exacerbate mental health challenges, particularly among minority students. However, protective factors such as peer support and a strong sense of school connectedness have been shown to promote positive mental health and reduce the incidence of health-risk behaviors (McBeath et al., 2017). To effectively support the overall well-being and academic success of vocational college students, it is essential to address their multifaceted needs. Approaches rooted in positive psychology, which focus on cultivating students' inner strengths and psychological

resilience, may be particularly beneficial in this context. A comprehensive understanding of the factors influencing the health development of vocational college students can inform the design of more effective interventions and support services (Fu & Wang, 2023). Research into teaching models aimed at enhancing the physical and mental health of vocational college students reveals that current physical education approaches require continuous innovation to maintain student engagement and enthusiasm for exercise. Various models have been proposed to address these needs.

For instance, Wang (2023) suggested an innovative teaching model focused on the cultivation of skilled talents, while Zhang (2021) introduced an online teaching model grounded in cognitive psychology. Wu (2020) explored the impact of the flipped classroom teaching model, Li (2020) developed an integrated classroom teaching model combining “divided + PBL,” and Zeng (2017) constructed a comprehensive physical and mental health education model. Despite the significant progress made in this area, current research still faces limitations and challenges. Much of the existing literature tends to focus on identifying and analysing the causes of physical and mental health problems among students and developing interventions to address these issues. However, there is relatively little research that integrates physical and mental health, exploring the mutual influence and reinforcing relationship between the two. Future research should emphasize practicality and operability, offering more specific and actionable guidance for educators and mental health professionals. By doing so, we can better support the holistic development of vocational college students, ensuring their physical and mental well-being is addressed in a more interconnected and comprehensive manner.

## DISCUSSION

The use of the “Sport World Campus” app among students is shaped by various factors, each contributing to different aspects of its effectiveness and adoption. This discussion delves into the main factors influencing students’ engagement with the app, as highlighted in the relevant literature. By examining these factors gender, age, academic major, family economic status, and parental educational background this discussion aims to provide a comprehensive understanding of how these elements interact to determine the use of fitness apps like “Sport World Campus.”

Gender has emerged as a significant factor influencing the use of the “Sport World Campus” app, with studies by Yang (2017) and Cheng (2019) indicating that female students are more inclined to use fitness apps compared to their male counterparts. This finding is consistent with broader trends in health and fitness, where women tend to

exhibit higher health consciousness and are more likely to engage in activities that promote physical well-being. The gender difference in app usage could be attributed to several factors, including a greater awareness of fitness and health issues among women, as well as social and cultural expectations that encourage women to maintain their physical appearance and overall health. Additionally, fitness apps often include features that appeal specifically to female users, such as calorie tracking, yoga routines, and community support, which may further increase their attractiveness to this demographic.

Age is another critical factor influencing the use of the “Sport World Campus” app. Studies by Feng (2018) and Ma (2020) have shown that senior students, who are typically older, tend to rely more on fitness apps due to their reduced availability for physical exercise. As students’ progress through their academic journey, their schedules become increasingly demanding, leaving them with less time for traditional forms of exercise. Fitness apps offer a convenient alternative, allowing these students to maintain their fitness levels through guided workouts and exercise tracking that can be done at their convenience. This reliance on fitness apps among older students may also reflect a greater recognition of the importance of health and fitness as they approach the transition to post-college life, where maintaining physical well-being becomes increasingly crucial.

The academic major of students significantly impacts their use of the “Sport World Campus” app. Li (2017) and Du (2018) found that medical students, in particular, use fitness apps less frequently due to their tight schedules and demanding academic commitments. Medical students often face intense workloads that leave them with little time or energy for extracurricular activities, including fitness. Consequently, their engagement with fitness apps is lower compared to students in less demanding fields. However, this does not necessarily indicate a lack of interest in fitness; rather, it highlights the challenges faced by students in rigorous academic programs. These findings suggest that fitness app developers could consider creating features tailored to the needs of medical students, such as quick, effective workouts that fit into tight schedules, or stress-relief exercises that can be done during brief breaks in study sessions.

Family economic status is another influential factor in the use of fitness apps, with Tong (2022) noting that students from wealthier families are more likely to engage with these digital tools. This finding aligns with the broader trend of socioeconomic disparities in health and wellness, where individuals from higher-income backgrounds generally have greater access to resources that support a healthy lifestyle. Wealthier students may have more disposable income to invest in fitness-related activities and technology, such as



gym memberships, sports equipment, and premium fitness app subscriptions. Additionally, they may have been raised in environments that emphasize the importance of health and wellness, further encouraging their use of fitness apps. The correlation between family economic status and app usage underscores the need for affordable and accessible fitness solutions that cater to students from diverse economic backgrounds, ensuring that all students have the opportunity to benefit from the health-promoting features of apps like “Sport World Campus.”

Finally, the educational background of students’ parents plays a crucial role in shaping their engagement with fitness apps. Dong (2023) found that students whose parents have higher levels of education are more likely to use fitness apps. This relationship may be explained by the fact that parents with higher educational attainment are more likely to value and prioritize health and fitness, passing these values on to their children. Educated parents may also have a better understanding of the benefits of physical activity and the role of technology in promoting health, encouraging their children to utilize tools like fitness apps to maintain their well-being. This influence is particularly strong in families where education is highly valued, and where parents serve as role models for healthy behavior. The impact of parental education on app usage highlights the

importance of early health education and the role that family dynamics play in shaping health behaviors.

Future research on the “Sport World Campus” app presents several promising directions that could further enrich our understanding of its impact and effectiveness (Refer to Table 5). One significant area for exploration is the influence of educational background on the app’s effectiveness. Future studies could investigate how the app performs across different educational settings, assessing whether variations in curriculum or institutional emphasis on health education affect student engagement and outcomes. Another crucial research direction involves examining the impact of cultural environments on the app’s effectiveness. Cultural factors can play a significant role in shaping attitudes toward fitness and health management, and understanding how these factors interact with the app’s usage could provide valuable insights for tailoring its features to diverse student populations. In addition to these broader sociocultural considerations, there is a need for more field research and experimental studies to validate existing findings and recommendations. Conducting empirical research in real-world settings would help to confirm the app’s efficacy and provide practical evidence that could guide future improvements and implementations.

**Table 5:** Future Research Directions

Research Directions	Description
Educational Background Impact	Explore the effectiveness of the “Sport World Campus” APP in different educational backgrounds
Cultural Environment Impact	Study the impact of different cultural environments on the effectiveness of the APP
Field Research and Experiments	Conduct field research and experimental studies to validate the study’s conclusions and recommendations
Other Health Management Apps	Explore other types of health management apps to enrich the theory and practice of student health education

Finally, exploring other types of health management apps could contribute to a more comprehensive theory and practice of student health education. By comparing the “Sport World Campus” app with other health management tools, researchers can identify best practices and innovative approaches that enhance the overall effectiveness of digital health interventions in educational contexts. In summary, future research directions for the “Sport World Campus” app should focus on understanding its effectiveness across different educational backgrounds and cultural environments, validating findings through field research and experiments, and broadening the scope of study to include other health management apps. These avenues of inquiry will help to refine and expand the app’s role in promoting student health and well-being.

## CONCLUSION

In conclusion, the use of the “Sport World Campus” app among students is influenced by a complex interplay of factors, including gender, age, academic major, family economic status, and parental educational background. Each of these factors contributes to the way students engage with the app, highlighting the importance of understanding the diverse needs and circumstances of different student groups. Female students, who are more health-conscious, are more likely to use fitness apps, while older students rely on them as a convenient alternative to traditional exercise routines. Medical students, despite their interest in health, use these apps less frequently due to their demanding schedules, suggesting a need for more tailored solutions. Additionally, students from wealthier families and those with more

educated parents are more likely to engage with fitness apps, reflecting broader socioeconomic and educational influences on health behavior. These findings underscore the importance of designing fitness apps that are inclusive and accessible to all students, regardless of their background or circumstances. Developers should consider the specific needs of different student demographics, creating features and content that cater to their unique challenges and preferences. For example, quick, stress-relief exercises for medical students, affordable options for students from lower-income families, and features that appeal to both genders could enhance the appeal and effectiveness of fitness apps like “Sport World Campus.”

Furthermore, these insights suggest that educational institutions and policymakers should recognize the role of digital tools in promoting student health and well-being. By integrating fitness apps into campus wellness programs and providing support for their use, schools can help ensure that all students have the opportunity to maintain their physical and mental health during their academic journey. This holistic approach to student health, supported by technology, can contribute to the overall well-being of the student population, helping them achieve success both academically and personally. Ultimately, the “Sport World Campus” app represents a valuable resource for students seeking to enhance their physical fitness, mental health, and overall well-being. By understanding the factors that influence its use, we can better support the diverse needs of the student body, ensuring that all students have access to the tools they need to lead healthy, balanced lives. As the landscape of higher education continues to evolve, the integration of digital health tools like fitness apps will likely become an increasingly important component of student wellness strategies, offering new opportunities for promoting health and wellness on college campuses.

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